

CLAIMS

1. A noncontact conductivity measuring instrument using a microwave, the noncontact conductivity measuring instrument characterized by including:

an oscillator which performs oscillation of the microwave;

a circulator which is connected to the oscillator;

a horn antenna which is connected to the circulator, the horn antenna transmitting the microwave to a sample and receiving a reflected wave;

a detector which is connected to said circulator, the detector outputting a voltage proportional to a square of magnitude of the received microwave; and

computing means for inputting said voltage to compute conductivity.

2. A noncontact conductivity measuring instrument according to claim 1, characterized in that said circulator is in contact with the oscillator through an isolator.

3. A noncontact conductivity measuring instrument according to claims 1 or 2, characterized in that a frequency of the microwave oscillating in said oscillator is 94 GHz when a silicon wafer is measured.